

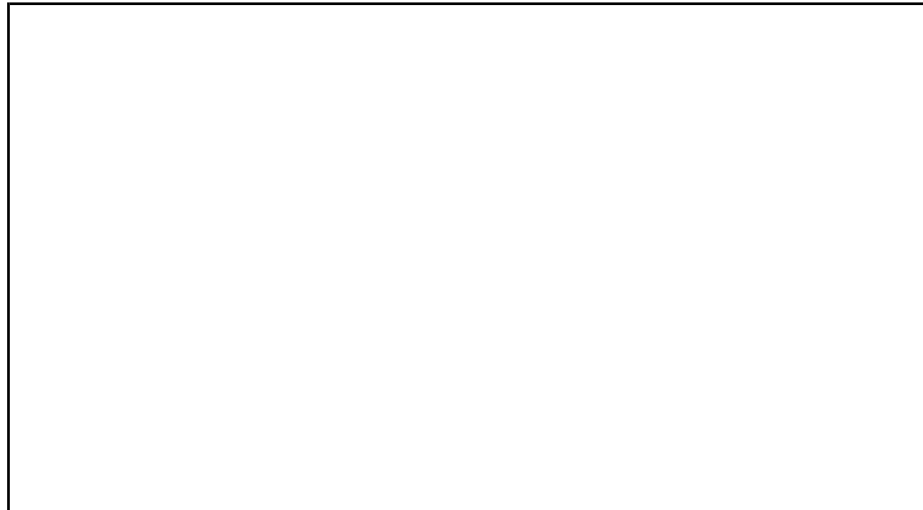


50JJ,JK-1SB

**50JJ,JK034, 038, 044, 048, 054, 064, 074
SINGLE-PACKAGE COOLING UNITS
EXTENDED CHASSIS**

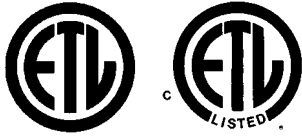
**VARIABLE VOLUME
CONSTANT VOLUME
FACTORY-INSTALLED OPTIONAL
ELECTRIC HEAT**

- PERFORMANCE DATA**
- TYPICAL FIELD WIRING**
- CERTIFIED DIMENSION PRINT**
- CERTIFIED ROOF CURB
DIMENSION PRINT**



Date:	Supersedes:	50JJ,JK034,038,044,048,054,064,074 SINGLE-PACKAGE COOLING UNITS, EXTENDED CHASSIS FACTORY- INSTALLED OPTIONAL ELECTRIC HEAT		50JJ,JK	Rev.:
JOB NAME:		LOCATION:			
BUYER:		BUYER P.O. #		CARRIER #	
UNIT NUMBER:		MODEL NUMBER:			
PERFORMANCE DATA CERTIFIED BY:				DATE:	

DESCRIPTION



50JJ,JK units are completely packaged, prewired and precharged cooling only units with electric heat available. 50JJ,JK units are built for **BOTTOM** supply and return applications. Their waterproof construction makes 50JJ,JK units ideally suited for installation on the accessory roof curb which is NRCA approved.

- 50JJ units have CONSTANT VOLUME controls. 36, 72 or 108 kW electric heat available.
- 50JK units have self-diagnostic VARIABLE AIR VOLUME controls. 36 or 72 kW electric morning warm-up heat available.
- Unit includes space and coil tracks downstream of the evaporator for field- or factory-installation of auxiliary devices.

FEATURES

Large hinged access doors.
Standard one-year warranty.
Five-year non pro-rated warranty on electric heater element is standard when heater is factory installed.
Standard unit as factory-assembled is listed by ETL and ETL, Canada.
Units are rated in accordance with ARI Standard 360.
115-volt and 24-volt control circuit.
Two-inch disposable-type return air filters.
Semi-hermetic Carrier compressors.
Lifting lugs.
Dual refrigeration circuits.
Crankcase heaters.
Circuit breaker protection for all power components.
Single low rpm supply fan with 2-in. deflection springs under fan sled.
High efficiency indoor motors (supply and exhaust).

Tuff-Skin Rx anti-microbial insulation.
Sloped condensate pan.
Single-point electric service entry.
Manual adjustable outside air intake for up to 25% outside air.
Cabinet made of pre-painted galvanized steel.
Compressor protection includes high- and low-pressure cutouts.
Evaporator-fan motors are protected by circuit breakers.
Condenser-fan motors are internally protected.
Low outdoor temperature cooling operation to 45° F as standard.
VAV (JK)
• Self-diagnostic microprocessor based controls.
• Hot gas bypass in addition to 4 - 6 stages of cooling capacity control.
• Electric heat morning warm up (optional).
CV (JJ)
• Two-stage cooling.
• Two-stage heating (option).

PERFORMANCE DATA

Unit Operating Weight _____ lb

Curb Weight _____ lb

COOLING

Gross Total Cap. _____ Btuh @ Condenser Air Temp _____ °F
Gross Sensible Cap. _____ Btuh Compressor Power Input _____ kW
Indoor Entering Air db _____ °F wb _____ °F
Cfm _____ Ext. Static Pressure _____ in. wg
Indoor Fan Motor Size _____ Hp
Exhaust Fan Motor Size _____ Hp
Return Fan Motor Size _____ Hp

HEATING

Heating Capacity:
Stage 1 _____ Btuh
Stage 2 _____ Btuh
Heating Capacity Total _____ Btuh
Stage 1 _____ kW
Stage 2 _____ kW
Heating Capacity Total _____ kW

ELECTRICAL DATA

Power Supply to Unit _____ Volts _____ Phase _____ Hz Minimum Circuit Amps _____ Maximum Fuse Amps _____

OPTIONS AND ACCESSORIES

FACTORY-INSTALLED OPTIONS (FIOP)

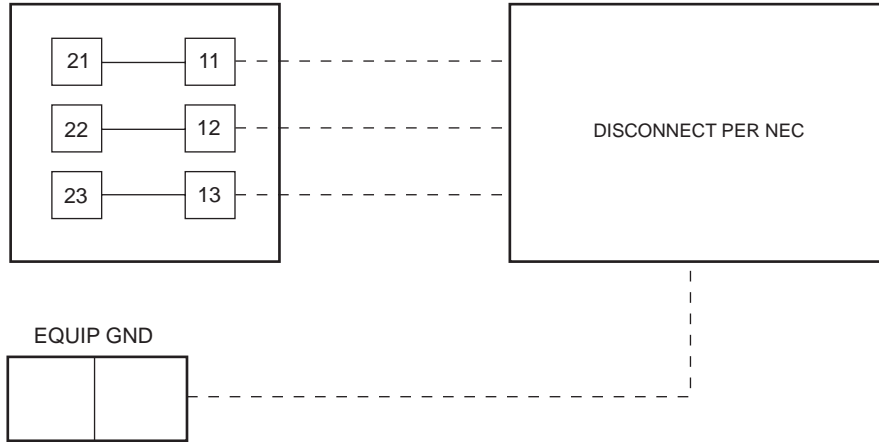
- ☐ Inlet Guide Vanes or Variable Frequency Drives (JK only)
- ☐ Integrated Economizer with Low Leak Dampers and Spring Return Motor
- ☐ Two-Inch Pleated Filters (30%)
- ☐ Bag Filters with Prefilters (90%)
- ☐ Barometric Relief
- ☐ Constant Volume Power Exhaust (JJ only)
- ☐ 100% Modulating Power Exhaust (JJ and JK)
- ☐ Premium-Efficiency Indoor Fan Motor (208, 230, 460 V)
- ☐ Electric Heat
- ☐ Copper Condenser Coil
- ☐ Pre-Coated Al Fin Condenser Coil
- ☐ Hot Gas Bypass
- ☐ Non-Fused Unit Mounted Disconnect

FIELD-INSTALLED ACCESSORIES

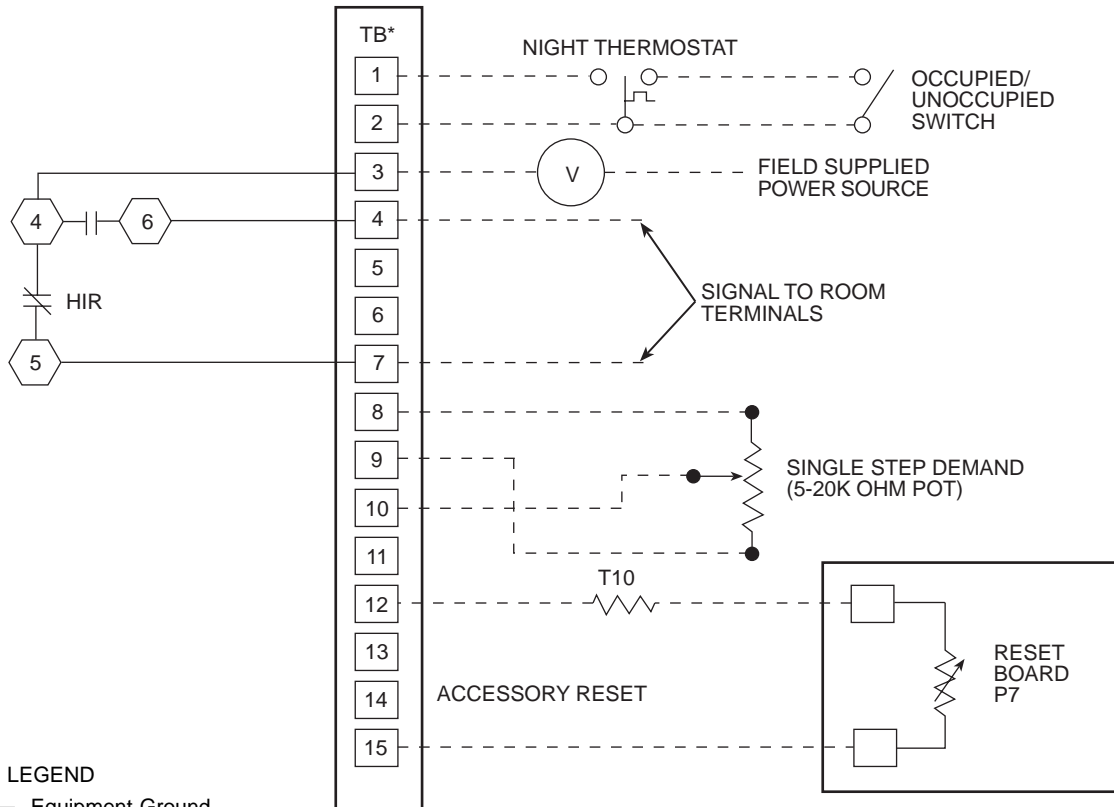
- ☐ Optional 4-Year Extended Compressor Warranty
- ☐ Roof Curb with Condenser End Support (50, 60, 70 ton)
- ☐ Roof Curb to Enclose the Condenser Section (50, 60, 70 ton)
- ☐ Roof Curb with Full Perimeter Support (30, 35, 40, 45 ton)
- ☐ Barometric Relief
- ☐ 100% Modulating Power Exhaust (JJ and JK)
- ☐ Electric Heat
- ☐ Condenser Hail Guard
- ☐ Compressor Unloaders
- ☐ Motormaster® Head Pressure Control
- ☐ Space Temperature Reset (JK only)
- ☐ Two-Step Demand Limit (JK only)
- ☐ Thermostat and Subbase (JJ only)

TYPICAL VAV WIRING

FIELD POWER WIRING CONNECTIONS



FIELD CONTROL WIRING — VARIABLE VOLUME UNITS



LEGEND

- EQUIP GND** — Equipment Ground
- HIR** — Heater Interlock Relay
- NEC** — National Electrical Code
- TB** — Terminal Block
- Factory Wiring
- - - Field Wiring

*TB3 on 034, 038, 044, 048 units.
TB4 on 054, 064, 074 units.

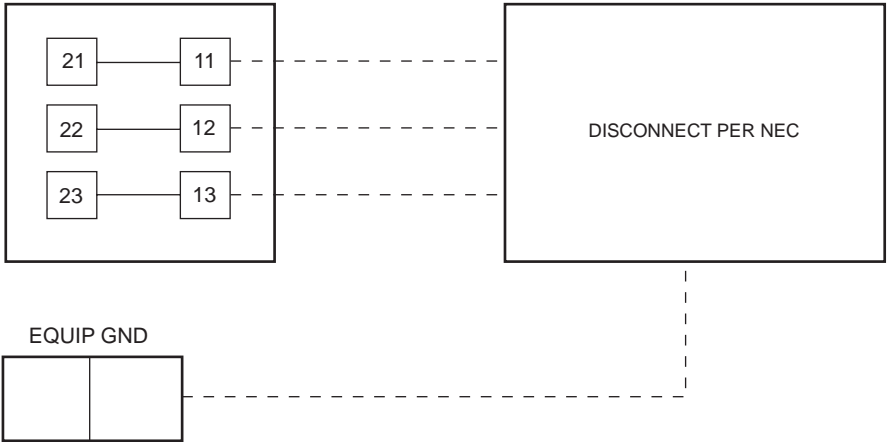
NOTES:

1. SW1 — Field-supplied switch (or time clock) used to move unit in and out of the occupied mode.
2. If unit has heat, field must wire between terminals 3 and 4 or 3 and 7 and supply power source to drive room terminals wide open during heating.
3. Night Thermostat — Field-supplied thermostat which can be used to keep building from becoming too hot or too cold when unit is in the unoccupied mode.

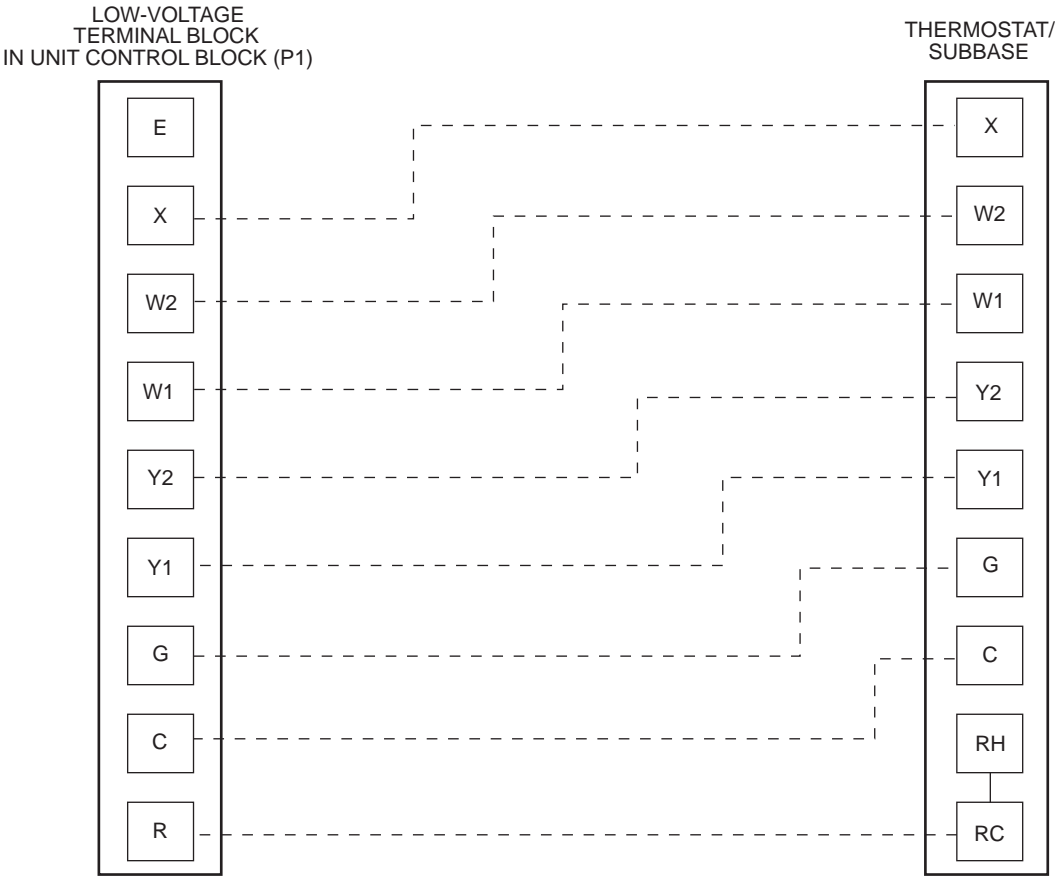
4. Single-step demand limit consists of a field-supplied 5 to 20 K-ohm potentiometer wired to TB4 as shown.
5. If temperature reset is used, thermistor T10 must be wired in series with potentiometer P7 (located on the reset board) and wired to TB4 as shown. T10 and the reset board are included in accessory package 50DJ00021.

TYPICAL CONSTANT VOLUME WIRING

FIELD POWER WIRING CONNECTIONS



FIELD CONTROL THERMOSTAT WIRING



CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

CERTIFIED DIMENSION PRINT



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CARRIER

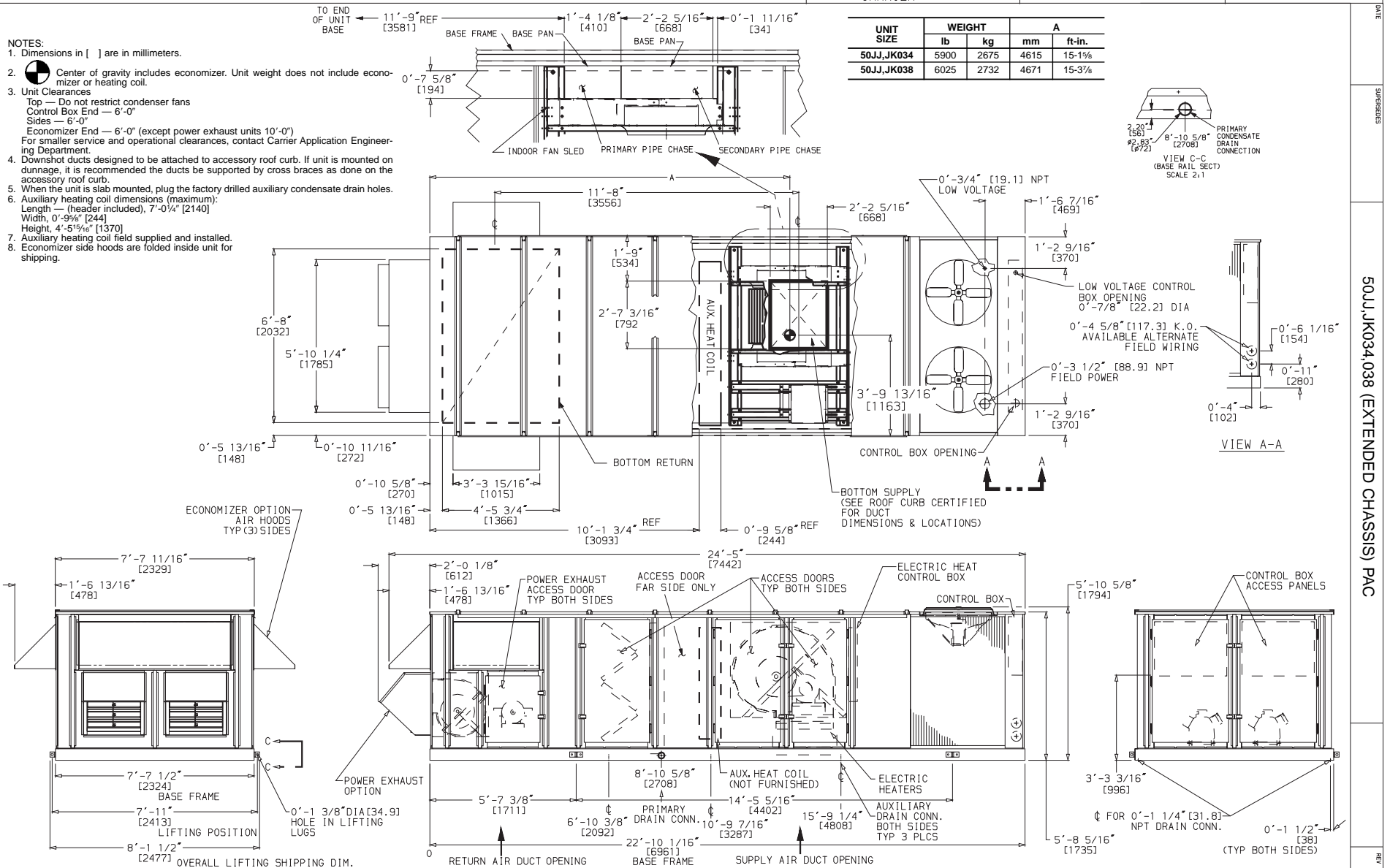
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NOTES:
1. Dimensions in [] are in millimeters.

2. Center of gravity includes economizer. Unit weight does not include economizer or heating coil.
3. Unit Clearances
Top — Do not restrict condenser fans
Control Box End — 6'-0"
Sides — 6'-0"
Economizer End — 6'-0" (except power exhaust units 10'-0")
For smaller service and operational clearances, contact Carrier Application Engineering Department.
4. Downshot ducts designed to be attached to accessory roof curb. If unit is mounted on dunnage, it is recommended the ducts be supported by cross braces as done on the accessory roof curb.
5. When the unit is slab mounted, plug the factory drilled auxiliary condensate drain holes.
6. Auxiliary heating coil dimensions (maximum):
Length — (header included), 7'-0 1/4" [2140]
Width, 0'-9 1/8" [244]
Height, 4'-5 1/4" [1370]
7. Auxiliary heating coil field supplied and installed.
8. Economizer side hoods are folded inside unit for shipping.



CERTIFIED DIMENSION PRINT



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2. Center of gravity includes economizer. Unit weight does not include economizer or heating coil.

3. Unit Clearances

Top — Do not restrict condenser fans

Control Box End — 6'-0"

Sides — 6'-0"

Economizer End — 6'-0" (except power exhaust units 10'-0")

For smaller service and operational clearances, contact Carrier Application Engineering Department.

4. Downshot ducts designed to be attached to accessory roof curb. If unit is mounted on downshot, it is recommended the ducts be supported by cross braces as done on the accessory roof curb.

5. When the unit is slab mounted, plug the factory drilled auxiliary condensate drain holes.

6. Auxiliary heating coil dimensions (maximum):

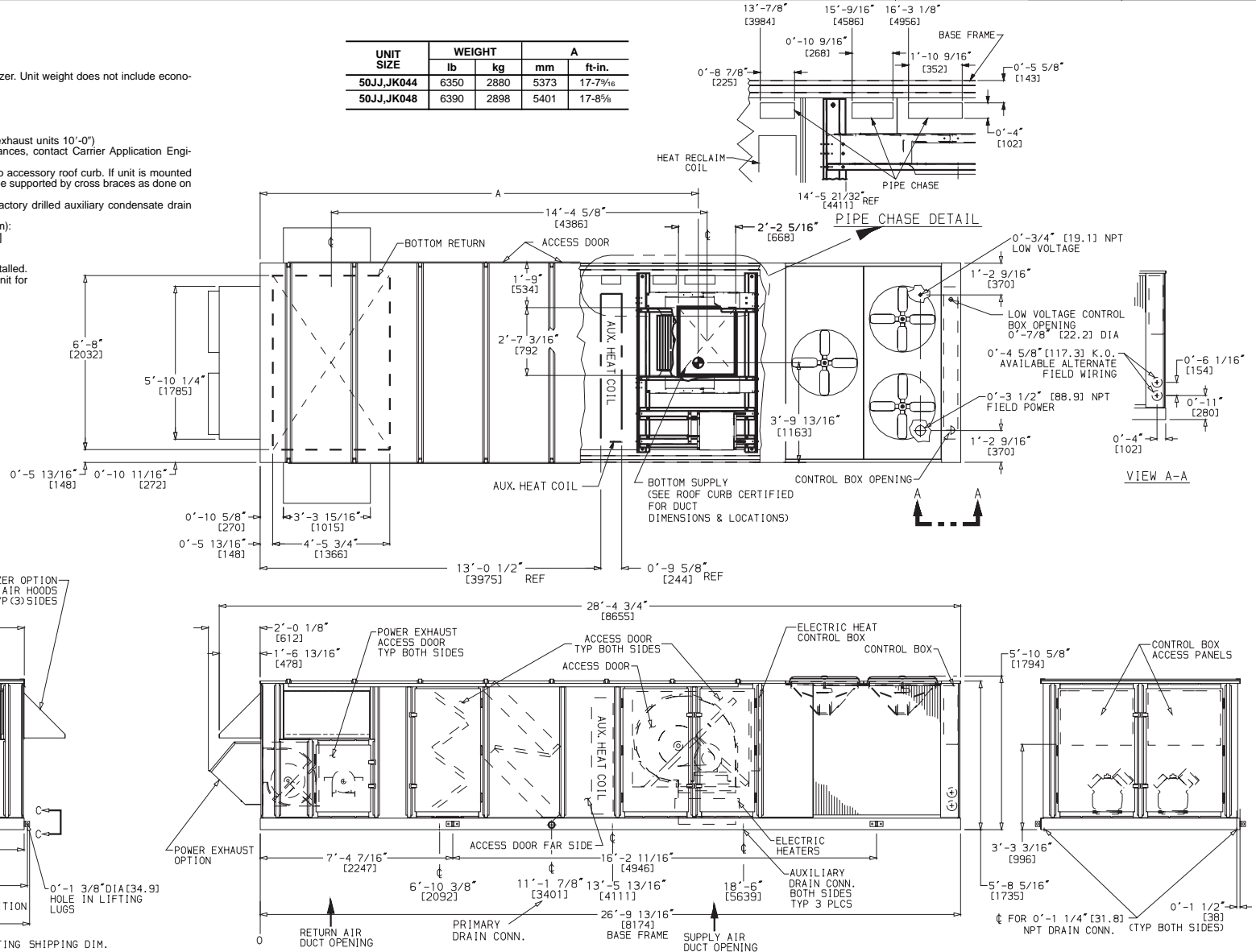
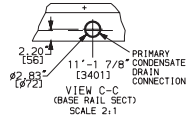
Length — (header included), 7'-0 1/4" [2140]

Width, 0'-9 1/4" [244]

Height, 4'-7 1/2" [1410]

7. Auxiliary heating coil field supplied and installed.

8. Economizer side hoods are folded inside unit for shipping.



50JJ,JK048,048 (EXTENDED CHASSIS) PAC

REV

CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

CERTIFIED DIMENSION PRINT



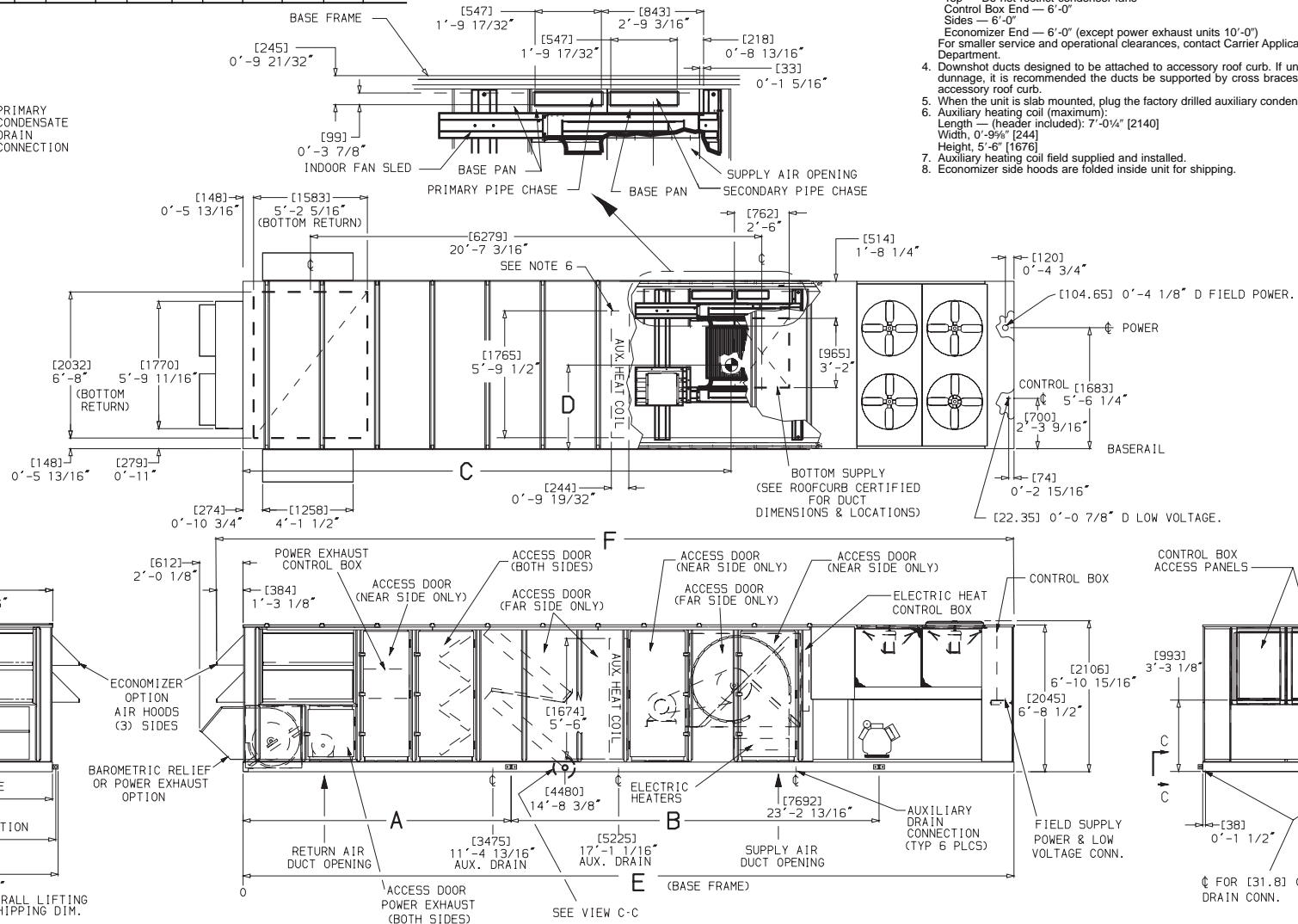
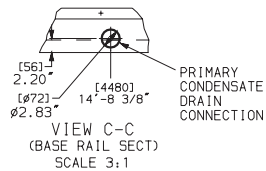
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UNIT SIZE	WEIGHT		A		B		C		D		E		F	
	lb	kg	mm	ft-in.	mm	ft-in.	mm	ft-in.	mm	ft-in.	mm	ft-in.	mm	ft-in.
50JJ,JK054	8248	3740	3383	11-1 1/16	5468	17-11 1/4	5888	19-3 1/16	1163	3-9 1/2	10 732	35-2 1/2	11 116	36-5 1/8
50JJ,JK064	8548	3877	3383	11-1 1/16	5468	17-11 1/4	5888	19-3 1/16	1163	3-9 1/2	10 732	35-2 1/2	11 116	36-5 1/8
50JJ,JK074	8978	4071	3728	12-2 3/4	5123	16- 9 1/16	6853	22-5 1/16	1163	3-9 1/2	11 641	38-2 1/16	12 025	39-5 1/8



50JJ,JK054-074 (EXTENDED CHASSIS) PAC

DATE

SUBMITTALS

REV

CERTIFIED ROOF CURB DIMENSION PRINT



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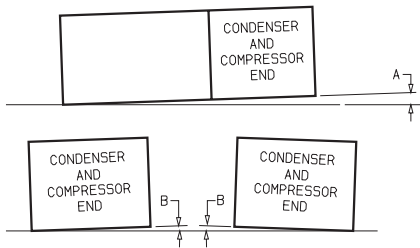
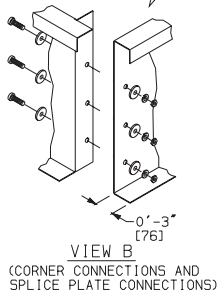
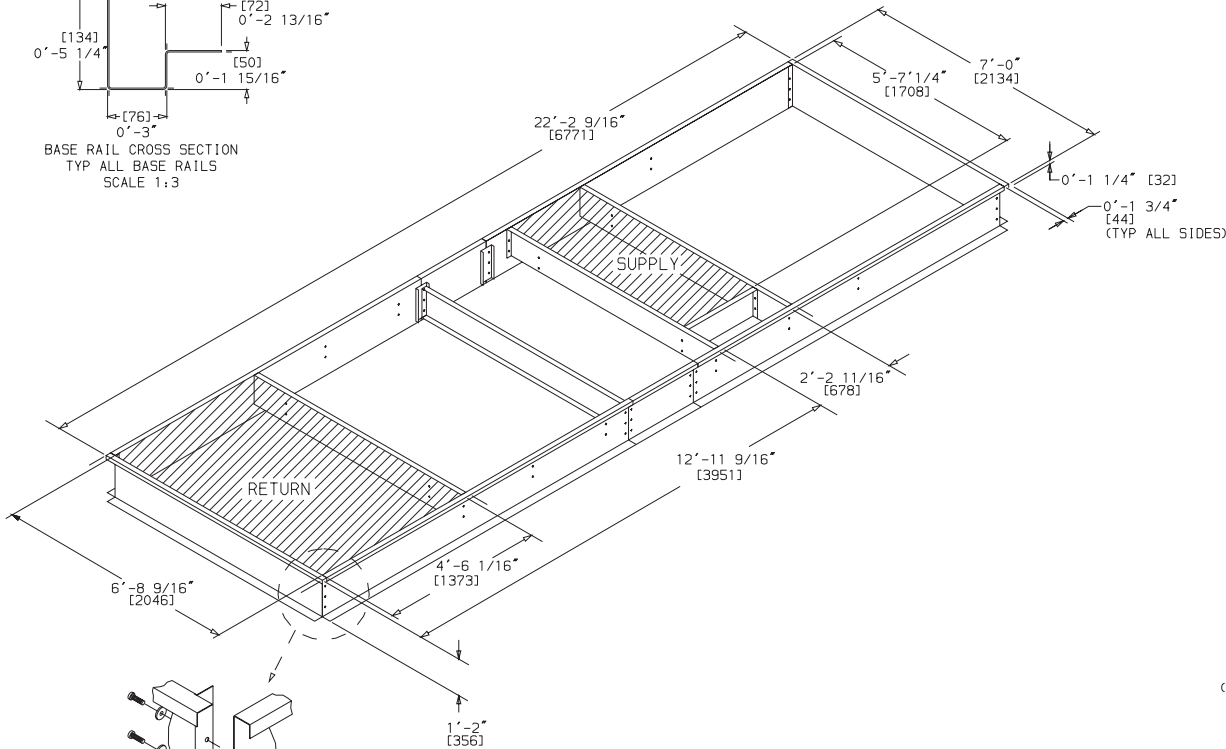
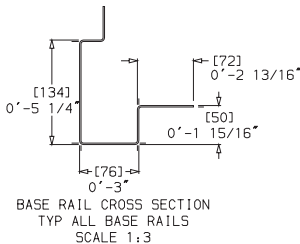
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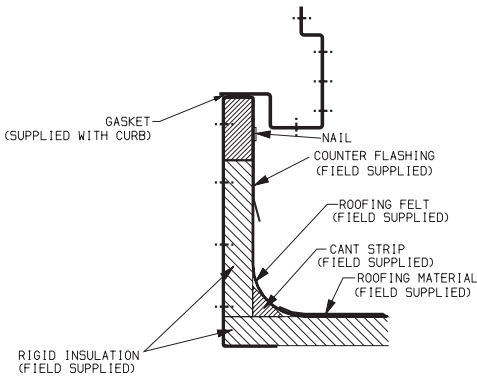
- 1. ROOF CURB IS SHIPPED DISASSEMBLED.
- 2. ROOF CURB: 14 GA. [VA03-56] STL.
- 3. DIMENSIONS IN [] ARE MILLIMETERS.



DIMENSIONS
(degrees and inches)

A		B	
DEG.	IN.	DEG.	IN.
1.0	2.0	.50	.75

UNIT LEVELING TOLERANCES
*From edge of unit to horizontal.



ROOF CURB - 50UJK034,038 (EXTENDED CHASSIS)

DATE

SPECIFICATIONS

REV

CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

CERTIFIED ROOF CURB DIMENSION PRINT



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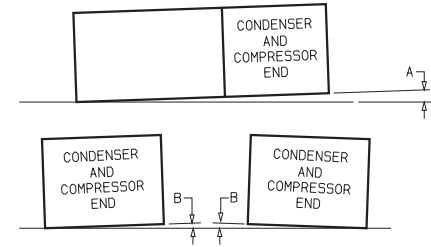
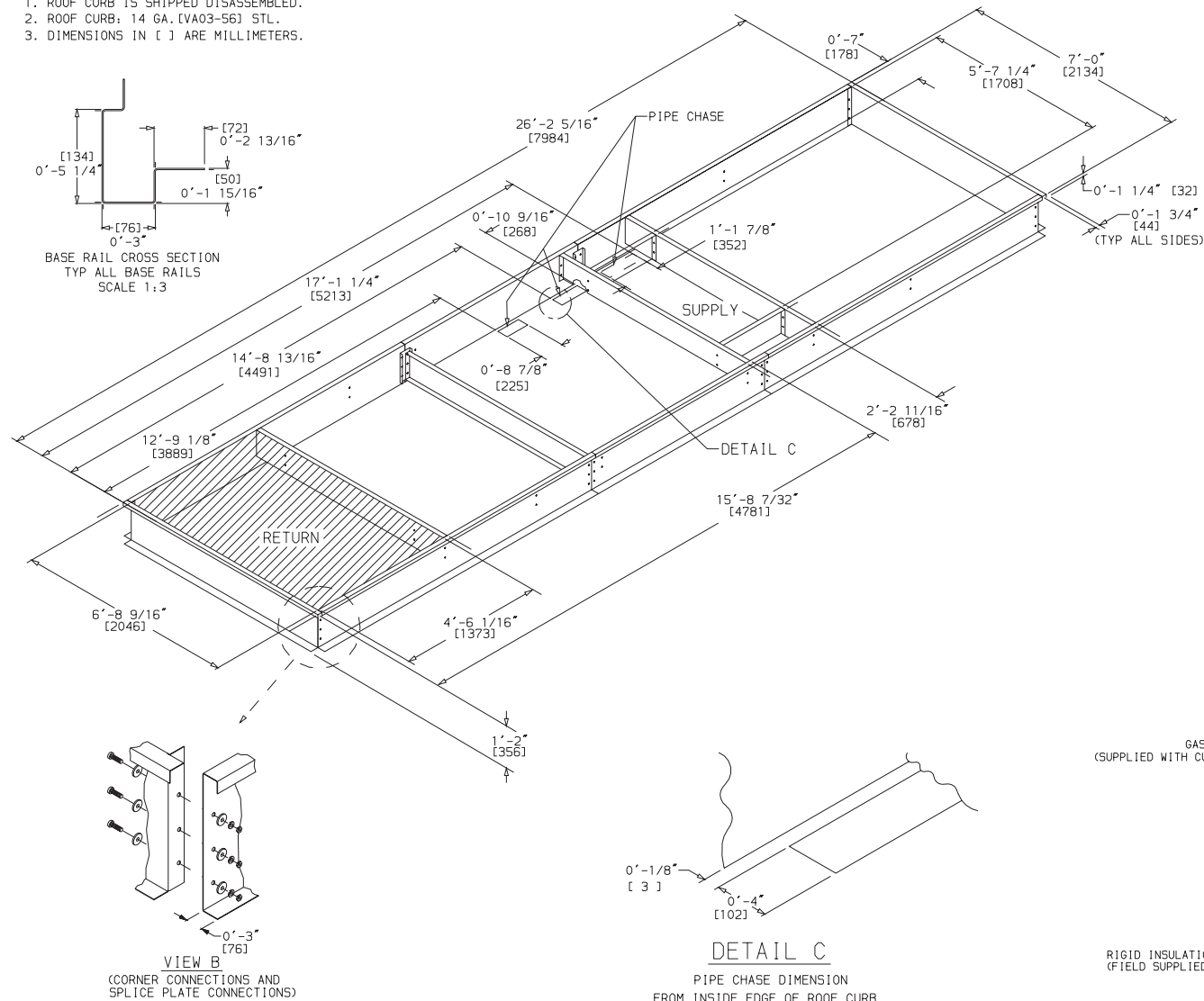
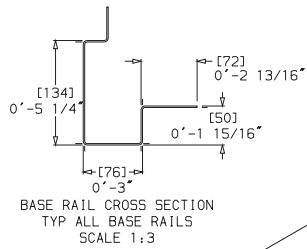
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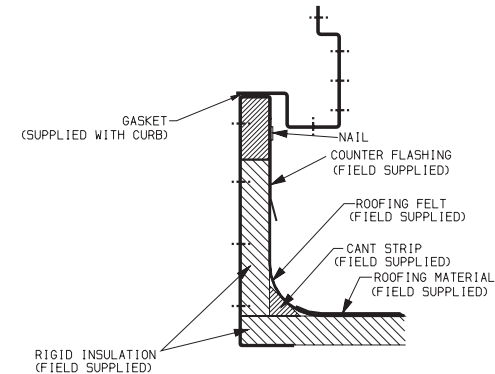
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2. ROOF CURB: 14 GA. [VA03-56] STL.
3. DIMENSIONS IN [] ARE MILLIMETERS.



DIMENSIONS
(degrees and inches)

A		B	
DEG.	IN.	DEG.	IN.
1.0	2.0	.50	.75

UNIT LEVELING TOLERANCES
*From edge of unit to horizontal.



DATE

SURFACES

ROOF CURB — 50UJK04,048 (EXTENDED CHASSIS)

REV

CERTIFIED ROOF CURB DIMENSION PRINT

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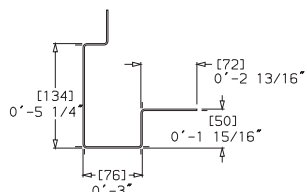
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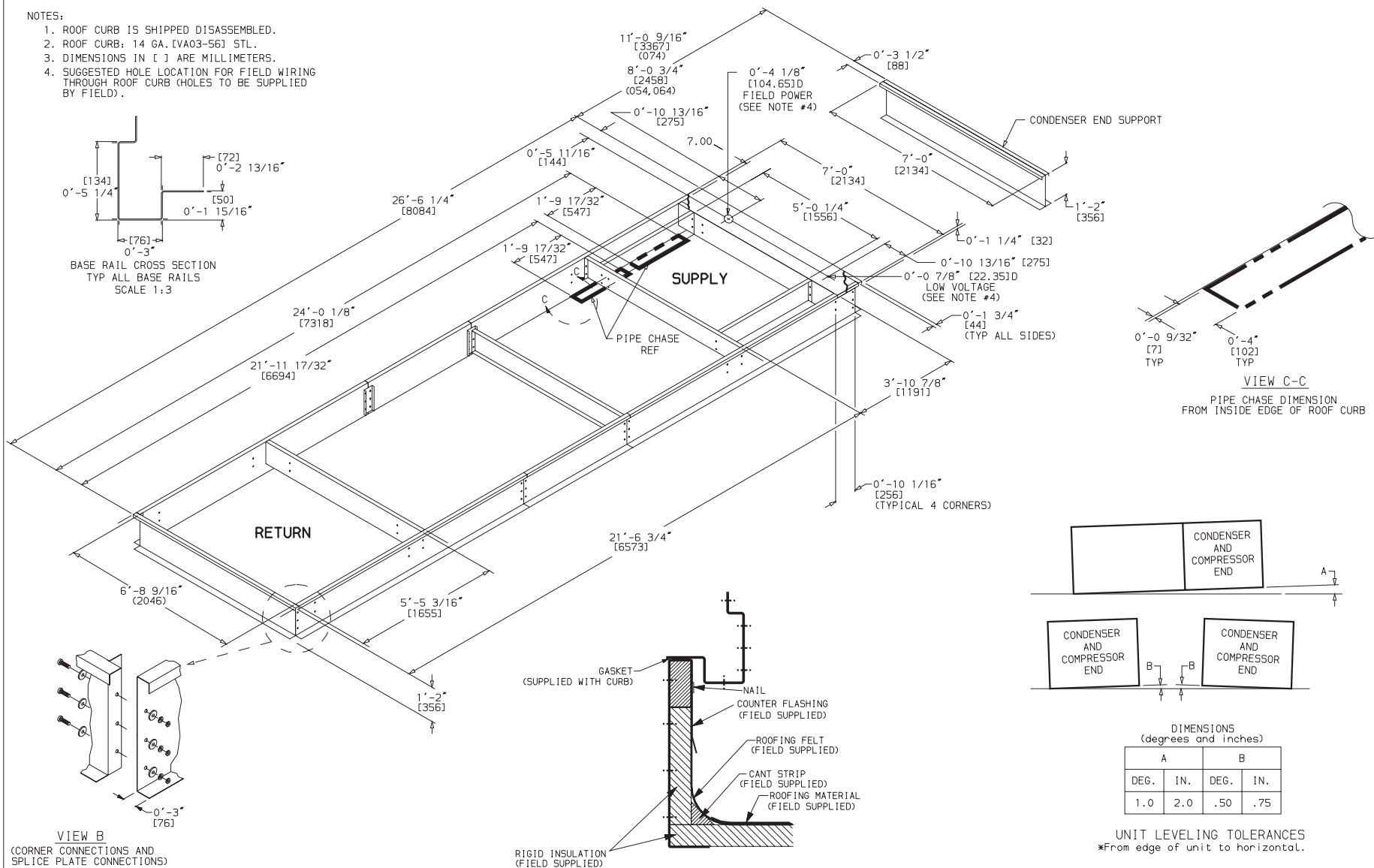
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NOTES:

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2. ROOF CURB: 14 GA. [VA03-56] STL.
3. DIMENSIONS IN [] ARE MILLIMETERS.
4. SUGGESTED HOLE LOCATION FOR FIELD WIRING THROUGH ROOF CURB (HOLES TO BE SUPPLIED BY FIELD).



BASE RAIL CROSS SECTION
TYP ALL BASE RAILS
SCALE 1:3



VIEW B

(CORNER CONNECTIONS AND
SPLICE PLATE CONNECTIONS)

VIEW C-C

PIPE CHASE DIMENSION
FROM INSIDE EDGE OF ROOF CURB

DIMENSIONS
(degrees and inches)

A		B	
DEG.	IN.	DEG.	IN.
1.0	2.0	.50	.75

UNIT LEVELING TOLERANCES
*From edge of unit to horizontal.

*From edge of unit to horizontal.

ROOF CURB — 50JJ,JK054-074 (EXTENDED CHASSIS)

1

CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

CERTIFIED ACCESSORY ROOF CURB DIMENSION PRINT



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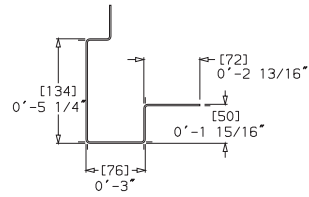
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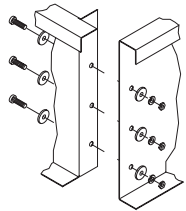
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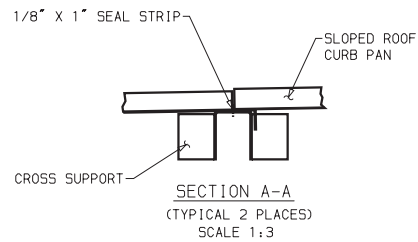
1. ROOF CURB ACCESSORY IS SHIPPED DISASSEMBLED.
2. DIMENSIONS IN [] ARE MILLIMETERS.
3. ROOF CURB: 14 GA. [VA03-56] STL.
ROOF CURB PANS: 16 GA. [VA03-56] STL.



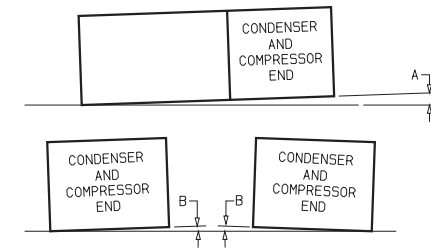
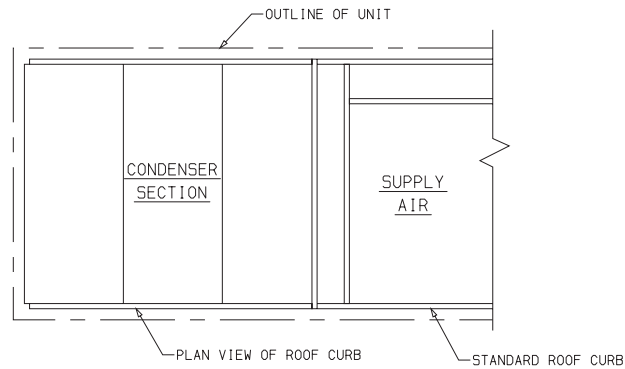
BASE RAIL CROSS SECTION
TYP ALL BASE RAILS
SCALE 1:3



VIEW B
(CORNER CONNECTIONS AND
SPLICE PLATE CONNECTIONS)



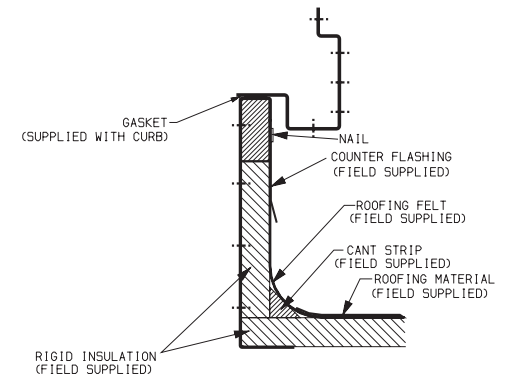
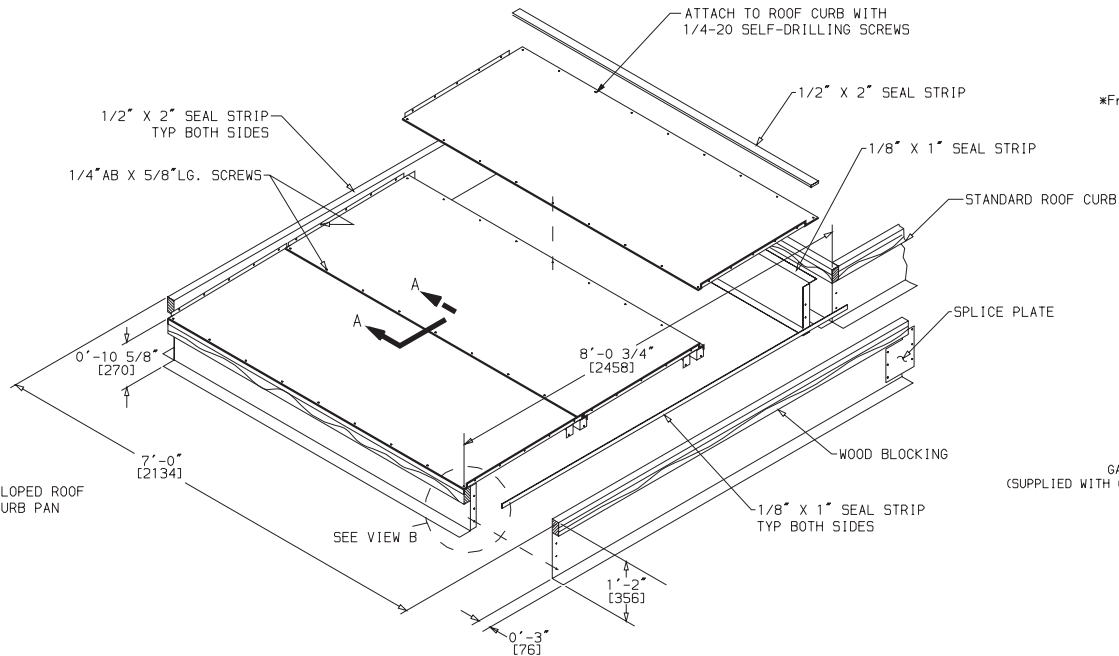
SECTION A-A
(TYPICAL 2 PLACES)
SCALE 1:3



DIMENSIONS
(degrees and inches)

A		B	
DEG.	IN.	DEG.	IN.
1.0	2.0	.50	.75

UNIT LEVELING TOLERANCES
*From edge of unit to horizontal.



DATE

SURFACES

ACCESSORY ROOF CURB — 50J,JK054,064 (EXTENDED CHASSIS)

REV

ACCESSORY CERTIFIED ROOF CURB DIMENSION PRINT



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CARRIER

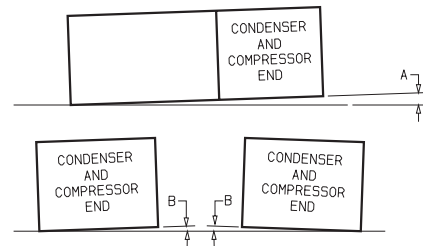
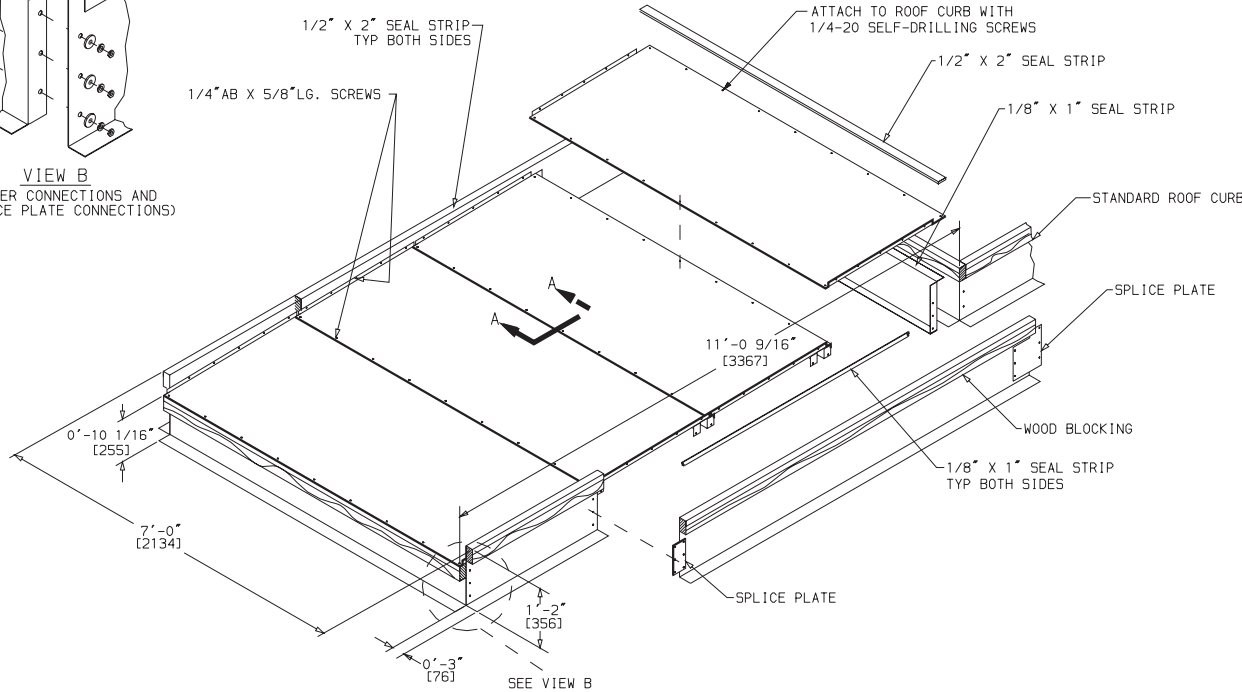
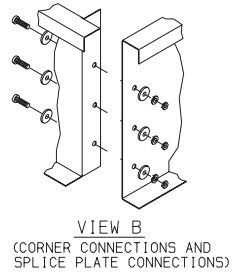
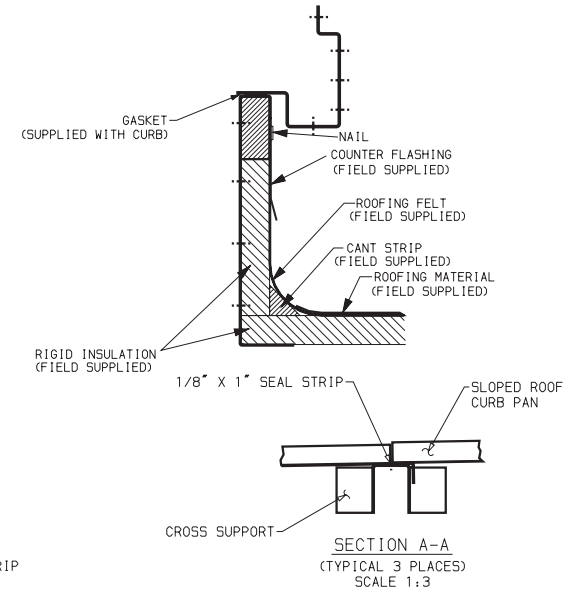
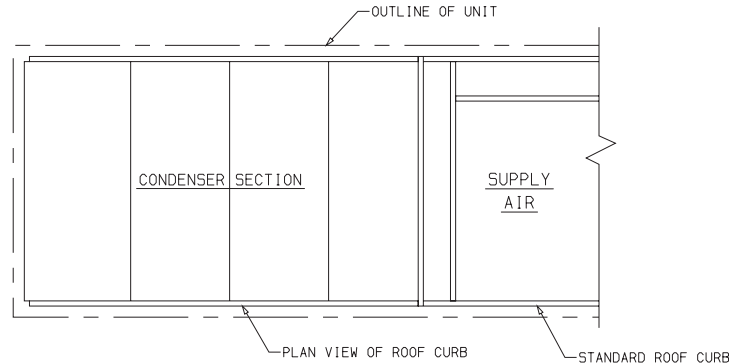
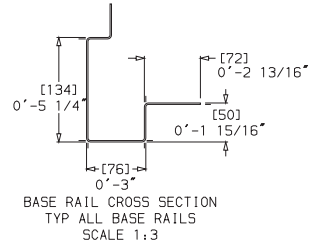
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NOTES:

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2. DIMENSIONS IN [] ARE MILLIMETERS.
3. ROOF CURB: 14 GA. [VA03-56] STL.
ROOF CURB PANS: 16 GA. [VA03-56] STL.



DIMENSIONS
(degrees and inches)

A		B	
DEG.	IN.	DEG.	IN.
1.0	2.0	.50	.75

UNIT LEVELING TOLERANCES
*From edge of unit to horizontal.

DATE
SPECIFICATIONS
ACCESSORY ROOF CURB — 50J,JK074 (EXTENDED CHASSIS)
REV